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## **REMARKS**

In the specification, the title has been amended. Claims 1-11 remain in this application. Claim 11 is added.

Applicant gratefully acknowledges the Examiner's finding that Claims 6-9 are directed to allowable subject matter. With respect to the Examiner's objections and rejections concerning the remaining claims, Applicant respectfully requests reconsideration in view of the foregoing amendments and the remarks hereinbelow.

Reconsideration of the Examiner's objection to Claims 4 and 6 is respectfully requested. Applicant amends Claim 4 to remove the phrase "time a" as required by the Examiner. Applicant amends Claim 6 to remove the phrase "time one" as required by the Examiner.

Reconsideration of the Examiner's rejection of Claims 1-3 under 35 U.S.C. 103(a) as being unpatentable over **Pyyhtia** et al. (U.S. Patent No. 6,552,319) in view of **Hoffman** (U.S. Patent No. 6,437,338) is respectfully requested.

With respect to Claim 1, Pyyhtia discloses in Column 8, lines 10-28:

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If the mode signal 124 is in logic high state, the control logic 120 operates in a grouping mode where two columns are selected simultaneously and advanced two columns at a time at each clock cycle 128. In this mode the signal propagates through the gate 136 instead of gate 133, so that the input of the first flip-flop 132 is also the input for the next flip-flop. This enables the flip-flops to change state simultaneously, selecting two columns at a time. In this mode the operation of the control logic 120 is identical to the operation of the control logic 138, where the selection signals of two successive rows are connected together. When similar logic is used for selecting rows, this mode selects groups of 2x2 pixels. In this example only two modes of operation are available, but the number of modes is by no means limited to these modes. Any number and combination of different modes can be included in the row and column selecting logic using the same principle as shown in FIG. 6. The number of mode inputs depends on the number of modes included in the design.

However, **Pyyhtia** does not disclose "ingoing address lines (4, ..., 8, ...) are selectably connected, by means of individually controllable switch elements (27, ..., 30, ...) and by way of a switching operation, to the respective next address line in such a manner that the sensor elements of at least two neighboring lines are activated by means of one ingoing signal," which is an essential element of Claim 1. The element is also undisclosed by **Hoffman**. Therefore, Claim 1 is patentable over the combination of **Pyyhtia** and **Hoffman**, as are Claims 2-3 which depend therefrom.

With respect to Claim 2, Hoffman discloses in Column 3, lines 13-20:

The present invention also enables the different regions 102 of the detector array 100 to be read out differently. For example, some of the regions 102 may be read out more often in a low spatial resolution mode, while other regions 102 are read out less often at a high spatial resolution mode. One application of this capability is to identify the regions 102 that lie within the patient being imaged and those regions that are background. The background regions 102

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However, Hoffman does not disclose "the distribution of a plurality of groups of sensor elements to be read out across the overall matrix is predetermined as a binning pattern and that the binning pattern is locally variable during an exposure," which is an essential element of Claim 2. The element is also undisclosed by Pyyhtia. Therefore, Claim 2 is patentable over the combination of Pyyhtia and Hoffman, as is Claims 3 which depends therefrom.

With respect to Claim 3, Pyyhtia discloses at Column 10, lines 5-6:

system. An imaging device as described herein has a capability to change the <u>resolution</u> of the device while the system is operating. The grouping of pixels into larger area super

However, **Pyyhtia** does not disclose "intervene in the programmed execution of a binning pattern during the exposure," where the term "binning pattern" encompasses "distribution of a plurality of groups" and not merely "magnitude of a group of sensor elements." Therefore **Pyyhtia** lacks an essential element of Claim 3, as does **Hoffman**. Therefore, Claim 3 is patentable over the combination of **Pyyhtia** and **Hoffman**.

Reconsideration of the Examiner's rejection of Claims 4, 5, and 10 under 35 U.S.C. 103(a) as being unpatentable over **Pyyhtia** et al. (U.S. Patent No. 6,552,319) in view of **Hoffman** (U.S. Patent No. 6,437,338) and further in view of **Fossum** et al. (U.S. Patent No. 5,949,483) is respectfully requested. A combination of prior art references renders an invention obvious under 35 U.S.C. § 103 if a hypothetical person with ordinary skill and knowledge in the art to which the invention pertains with full knowledge of all the pertinent prior art, when faced with the problem to which the claimed invention is addressed, would be led naturally to the solution adopted in the claimed invention or at least would naturally view that solution as an available alternative.

Combination of prior art references is improper if the prior art provides no teaching, suggestion, or incentive supporting the combination. According to the Examiner, "Pyyhtia however fails to explicitly disclose that each of the columns includes its own amplifier element," which is an essential element of Claim 4. Also, according to the Examiner, "Additionally, neither Pyythia nor Hoffman discloses that the signal is converted into a serial signal," which is an essential element of Claim 4.

However, no teaching, suggestion, or incentive supporting a combination of **Pyyhtia**, **Hoffman**, or **Fossum** to create the invention presented by Claim 4 is

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disclosed by **Pyyhtia**, **Hoffman**, or **Fossum**. Therefore, the references do not render Claim 4 unpatentable, nor by extension Claims 5 or 10 which depend therefrom.

The applicant submits that new Claim 11 is allowable over the cited references for at least the reasons given above for the allowability of Claims 1 and 4.

No extension fee is believed to be due. Should any unenclosed or additional fees be required under Rules 1.16 – 1.21 for any reason relating to the enclosed materials, the Commissioner is authorized to deduct said fees from Hulsey Grether + Fortkort LLP's Deposit Account No. 50-2726.

The applicant believes that the foregoing fully responds to all outstanding matters, respectfully submits that all remaining claims are in condition for allowance, and respectfully requests that a timely Notice of Allowance be issued so the present application may swiftly pass to issuance.

Respectfully Submitted,

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